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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|------------------|
| 09/593,800 | 06/15/2000 | TETSUO TANIGUCHI | 106514 | 1394 |
| 25944 | 7590 | 06/03/2004 | | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER CONNOLLY, PATRICK J | |
| | | | ART UNIT 2877 | PAPER NUMBER |

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,800

Applicant(s)

TANIGUCHI ET AL.

Examiner

Patrick J Connolly

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-- Th MAILING DATE of this communication appears on the cover sheet with th correspondenc addr ss --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8,10,12-16,21-24 and 35-46 is/are pending in the application.
- 4a) Of the above claim(s) 10,12-15 and 24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-8 and 35-46 is/are allowed.
- 6) ☒ Claim(s) 16 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 03312004 is acknowledged.

The traversal is on the following grounds:

- 1) A previous restriction requirement was made, found to be improper and withdrawn by a previous Examiner.
- 2) The claims were previously indicated as being in condition for allowance by said previous Examiner.
- 3) A search was performed on all the claims by said previous Examiner; therefore an undue burden of search has not been demonstrated.

This is not found persuasive for the following reasons:

- 1) Although drawn to the same claims, this is a different restriction requirement based upon a more appropriate classification of the different inventions involved therein.
- 2, 3) The previous actions, upon further review, do not include a full and thorough search of available prior art, therefore any previous indication of allowability may have been premature. A full and thorough search of prior art of the claims without the Restriction requirement would impose a serious and undue burden upon the Examiner.

The Examiner further acknowledges that this is a continuation of an International Application and not the National Stage of an International Application and hereby withdraws the analysis set forth in Page 2 of the previous Restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 21-23 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 21-23 provide for the use of an exposure apparatus, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

The following art rejection is based on the claims as understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16 and 21-23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,506,684 to Ota et al.

As to claims 16 and 21-23, Ota et al teaches a method of manufacturing a device using an exposure apparatus including transferring a mask pattern onto a substrate using the exposure apparatus.

Allowable Subject Matter

Claims 1, 4-8 and 35-46 are allowed.

The following is an examiner's statement of reasons for allowance:

As to claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious a stage device including: a first measurement system which measures a first of a plurality of stages in a certain movement plane; and a second measurement system which measures an amount of positional deviation of each of the plurality of stages from a predetermined reference position; wherein a measurement value obtained with the first measurement system is corrected based on the measurement result of the second measurement system, in combination with the rest of the limitations of claim 1.

As to claim 35, the prior art of record, taken alone or in combination, fails to disclose or render obvious a scanning exposure apparatus including: a first movable stage in a certain movement plane; a second movable stage in the plane independent of the first stage; and a control system which corrects measurement results of a first and second measurement system on the basis of the results of said measurement systems, in combination with the rest of the limitations of claim 35.

As to claim 43, the prior art of record, taken alone or in combination, fails to disclose or render obvious a stage device including: a first movable stage having a first reflective member and first reference mark; a second movable stage having a second reflective member and a

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second reference mark; and a controller that corrects an output of an interferometer system in accordance with a detection result of an optical sensor when the interferometer system detects switching between the position of the first movable stage and the position of the second movable stage, in combination with the rest of the limitations of claim 43.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J Connolly whose telephone number is 571.272.2412.


The examiner can normally be reached on 9:00 am - 7:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571.272.2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pjc PJC

05-28-2004



Samuel A. Turner
Primary Examiner